COMMUNICATIONS (800)

805.0 EQUIPMENT ACQUISTION

It is recognized that two-way radios are an important tool for communication by ITD personnel. Continuous review of the type, quality and quantity of radios purchased is required to ensure that ITD manages this resource effectively and efficiently.

The current expected service life for these radios is seven years. However, if the cost to repair a radio is more than one-half the cost to replace it, the radio should be replaced regardless of age. The Idaho Department of Administration Division of Information Technology and Communications Services, Microwave Services (MS) maintains an inventory of all two-way radios, including the year purchased, and annually will recommend to ITD which radios have reached their useful life and should be replaced. MS will also annually review the features of mobile and handheld radios available commercially and recommend those which ITD should purchase.

Supply Services will monitor ITD radio purchases to ensure that MS recommendations are being followed. Radios, other than the recommended models, may be purchased for certain equipment or positions if the additional cost can be justified. These "non-standard" radios will require approval of the Assistant Chief Engineer (Operations) on a case-by-case basis.

District Engineers, Assistant District Engineers and Regional/Maintenance Engineers are expected to monitor district requests for mobile and handheld radios to verify that efficient and effective use is being made of all communication media.

810.0 TWO-WAY RADIO COMMUNICATIONS

The department's radio communications system is a UHF repeater system selectable by utilizing subaudible tone for activation of the different repeaters. Three radio frequency channels are used in "pairs," which is discussed in Section 813.0.

811.0 POLICY

The Federal Communications Commission (FCC) regulates radio transmissions and issues licenses for radio stations.

812.0 RESPONSIBILITY

Each employee operating the department's radio facilities is responsible for conforming with FCC Rules. Violation of the FCC Rules and Regulations is a very serious matter and can result in fines and imprisonment.

The sections of FCC Rules which most directly apply to our operations are:

SUBPART N

Sec. 90.403 General Operating Requirements

- (c) Each licensee shall restrict all transmissions to the minimum practical transmission time and shall employ an efficient operating procedure designed to maximize the utilization of the spectrum.
- (d) The Commission expects each licensee to take reasonable precautions to prevent unnecessary interference.

Sec. 90.425 Station Identification

Each station or system shall be identified by transmission of the assigned call sign during each transmission or exchange of transmissions.

Sec. 90.433 Operator Requirements

(a) All transmitter adjustments or tests during the installation, servicing, or maintenance of a radio station which may affect the proper operation of such station shall be made by or under the immediate supervision and responsibility of a person holding a general commercial radio operator license (usually Bureau of Microwave Services personnel), who shall be responsible for the proper functioning of the station equipment.

Sec. 90.23 Highway Maintenance Radio Service

(a) Eligibility. Any territory, possession, state, county, city, town and similar governmental entity is eligible to hold authorizations in the highway maintenance radio service to operate stations for transmission of official highway activities of the licensee.

As an operator of two-way radio equipment, you must be thoroughly familiar with the rules that apply to your particular type of radio operation. Following these rules will help to eliminate confusion, assure the most efficient use of existing radio channels, and result in a smoothly functioning radio network.

When using your two-way radio, remember these rules:

• It is a violation of FCC Rules to interrupt any distress or emergency message. And, as your radio operates in much the same way as a telephone "party line," always listen to make sure that the line is clear – that no one else is on the air before sending messages. If someone is sending an emergency message, such as reporting a fire or asking for help in an accident, KEEP OFF THE AIR! Emergency calls have priority over all other messages.

- Use of profane or obscene language is prohibited by federal law.
- It is against the law to send false call letters or a false distress or emergency message.
- The FCC requires that you keep conversations brief and confine them to business. To save time, use coded messages whenever possible.
- Using your radio to send personal messages (except in an emergency) is a violation of FCC rules. You may send only those messages that are essential for the operation of your business.
- It is against federal law to repeat or otherwise make known anything you overhear on your radio. Conversations between others sharing your channel must be regarded as confidential.
- The FCC requires that you identify yourself at certain specific times by means of your call letters. Refer to Section 816 for the rules that apply to your particular type of operation for the proper procedure.
- No changes or adjustments shall be made to the equipment except by an authorized or certified electronic technician.

In addition to the rules above, remember that the news media and the public can monitor your radio communications by using scanners. Therefore, use common sense when communicating over the radio. Information of a sensitive nature or that should not be made public should be communicated other ways, such as by phone or cellular phone.

813.0 GENERAL

The radio signal from a mobile station or control station at a fixed office location is received at a "mobile relay" (repeater) station, usually a mountain top location, and retransmitted automatically on a "paired" radio channel to be received by mobile or control stations. Control and mobile stations send messages on one radio channel and receive on an associated different channel. The principal effect of the system is a significantly greater communications range between mobile stations.

Several repeaters are used in each district to provide adequate communications over the entire area. In order to select the particular repeater to be operated, control stations and mobile stations automatically apply a low level subaudible tone to the radio signal being transmitted. Only the repeater that has been equipped to decode the selected subaudible tone will rebroadcast the signal. Tone control is accomplished by the control or mobile station operator using a switch on an assembly made part of the control head or station. In most mobile cases, the repeater is selected by selecting different radio channels on the mobile. Contact your local communications office for channel information in your assigned area.

One of the best features of the repeater system is that a mobile radio operator can determine if he is within range of the base station. The repeaters are designed to stay on for a few seconds after the mobile or base station ceases transmission. Thus, to determine if a vehicle is within range of a particular repeater, select the proper tone and key the radio for approximately two seconds. If the vehicle is within a good communications area, the receiver will remain quiet for a few seconds and then sound a distinct click. If the vehicle is within a poor communications area, the receiver will give a crackling noisy sound for a few seconds before the click. If the vehicle is completely out of range, nothing will be heard.

In most districts there will be areas where more than one repeater will be able to be used at the same time. If two or more repeaters are simultaneously turned on, the message will be completely lost at the base station. This occurs when the base and mobiles are using different tones. To avoid this problem, the person initiating the call should always announce the tone being used. Once communications are established, the tone number may be omitted from each call.

A mobile in many parts of a district will be able to hear only one repeater. Thus, the base may be communicating with a mobile at the same time another mobile initiates a call. This will cause the base to hear two repeaters simultaneously and the message will be lost. This problem cannot be avoided; however, its effects may be reduced. When a mobile initiates a call, it should make its first call as short as possible. In this way, the interruption will be short. The calling mobile should then wait until the base calls back. The calling mobile should not initiate a second call to the base for at least one minute if the first call is not answered.

The 450 MHz radio band is primarily line of sight. Thus, if the mobile operator is unable to make radio contact in one location, he may, by moving a short distance, be able to provide the line of sight from the mobile radio to the repeater, which is necessary for communications. If the mobile operator is in a fringe communications area and is unable to make radio contact while the vehicle is in motion, the vehicle should stop and another attempt made to contact the base.

All department radios have a wide-spaced transmitter system in order to receive carto-car and repeater calls on the same channel. It is possible for car-to-car communications to override the base station calls. At all times, it is important to monitor the channel before transmitting in order to keep interference to a minimum.

When two mobiles need to communicate, they should use the car-to-car channel whenever possible. This channel is designed for short ranges only and will create a minimum of interference with other mobiles.

Due to the continuous use of radio-transmitting equipment at certain times of the year, it is necessary that cut out timers be installed on base station radios. These timer controls will allow for maximum continuous transmitting time of three minutes, which is required to prevent station burnout due to overheating of the final amplifier.

For identifying repeater use, it may be a good idea to use the repeater mountain location rather than a tone number or channel number. This is due to the various ways that access is obtained by the different radio configurations. District personnel using tone encoders should solely use tone numbers. If no encoders are used, just channels, call out the channel number. By far, the best would be to use mountain locations for the descriptor part of the call.

814.0 LIST OF REPEATERS STATEWIDE

	DISTRICT 1	TRANSMIT 458.150	RECEIVE 453.150
TONE	REPEATER LOCATION	COVERAGE AREA	
1	BLACK MTN.	BONNERS FERRY TO CANADA	
2	SCHWEITZER	SANDPOINT TO MONTANA BORD	DER
3	MICA PEAK	COEUR D'ALENE TO WASHINGTON	
4	WARDNER PEAK	KELLOGG AND SILVER VALLEY	-
5	ST. JOE BALDY	ST. MARIES-ST. JOE RIVER TO D	ISTRICT 2
6	HOODOO	PRIEST RIVER/SPIRIT LAKE	
7	LOOKOUT EAST	I-90 MONTANA BORDER	
9	MONTANA	MONTANA/IDAHO CO-OP	

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

	DISTRICT 2	TRANSMIT 458.450	RECEIVE 453.800
TONE	REPEATER	COVERAGE AREA	
	LOCATION	-	
1	COTTONWOOD	COTTONWOOD	
2	COLDSPRINGS	RIGGINS AREA	
3	WHITEBIRD HILL	WHITEBIRD AREA	
4	CASTLEBUTTE	LOCHSA AREA	
6	MOSCOW MTN.	MOSCOW AREA	
7	TEAKEN BUTTE	OROFINO AREA	
8	CULDESAC	CULDESAC AREA	
9	PILOT KNOB	SOUTH FORK	
10	WOODRAT	KAMIAH	

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

	DISTRICT 3	TRANSMIT 458.150	RECEIVE 453.150
TONE	REPEATER	COVERAGE AREA	
	LOCATION		
1	JACKSON PEAK	S.H. 21-LOWMAN AREA	
2	PILOT PEAK	S.H. 21-IDAHO CITY AREA	
3	SHAW MTN.	S.H. 21-LUCKY PEAK/EAST BO	DISE AREA
4	SHAFER BUTTE	BOISE VALLEY/HORSESHOE	BEND AREA
5	SNOWBANK	CASCADE TO MCCALL/CAME	BRIDGE TO COUNCIL
6	BRUNDAGE MTN.	MCCALL/NEW MEADOWS AR	EA
6	CINNIBAR	RIDDLE/GRASMERE/BRUNEA	U/DUCK VALLEY
		AREA	
7	STURGILL PEAK	U.S. 95-	
		FRUITLAND/WEISER/MIDVAI	LE/CAMBRIDGE
8	S. SQUAW BUTTE	U.S. 95-MARSING TO OREGON	N BORDER
9	PACKER JOHN	S.H. 55-HORSESHOE BEND/BA	NKS/CASCADE
10	BENNETT MTN.	I-84/U.S. 20-MTN. HOME AREA	Λ

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

	DISTRICT 4	TRANSMIT 458.050 RECEIVE 458.050
TONE	REPEATER LOCATION	COVERAGE AREA
1 2 3 4 5 6	HARRISON KETCHUM BALDY BELL MOUNTAIN ALBION BUTTE DAVIS MOUNTAIN ELLEN DEE	US 93 / TWIN FALLS AREA WOOD RIVER VALLEY TIMMERMAN HILL / CAREY AREA ALBION/DELCO / RUPERT / BURLEY AREA FAIRFIELD / BLISS / SHOSHONE AREA NEW REPEATER ON S. US 93
7 8 9 10	MOUNTAIN SWEETSER SUMMIT BASIN BUTTE POTAMAN PEAK GALENA SUMMIT	I-84 SUBLETT /COTTRELL /JUNIPER AREA STANLEY BASIN AREA SUNBEAM / CLAYTON / CHALLIS AREA N. KETCHUM TO STANLEY / SNRA

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

	DISTRICT 5	TRANSMIT 458.150	RECEIVE 458.150
TONE	REPEATER LOCATION	COVERAGE AREA	
1	MANSFIELD RIDGE	I-15-MALAD AREA	
2	PAPS PEAK	I-86-AMERICAN FALLS AREA	
3	EAST BUTTE	BLACKFOOT AREA	
4	SEDGWICK PEAK	SODA SPRINGS/DOWNEY/PREST	ΓON
5	HELL HOLE	MONTPELIER AREA	
6	CHINK'S PEAK	POCATELLO AREA	
7	BLACK MTN.	S.H. 34-WAYAN AREA	
8	ALBION BUTTE	I-86-AM. FALLS/ROCKLAND VA	LLEY

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

DISTRICT 6	TRANSMIT 458.450	RECEIVE 453.800
REPEATER LOCATION	COVERAGE AREA	
LOCATION		_
GRIZZLY MTN.	LEADORE	
RELAY RIDGE	IDAHO FALLS/DRIGGS AREA	
KELLY MTN.	RIRIE TO SWAN VALLEY	
SALMON BALDY	SALMON AREA	
GROUSE PEAK	CHALLIS AREA	
EAST BUTTE	ARCO AREA	
MONIDA	I-15-SPENCER TO MONTANA	
BLACK MTN.	PALISADES TO ALPINE WY	
ASHTON HILL	ISLAND PARK AREA	
STEIN MTN.	NORTH SALMON TO MONTANA	
MACKAY PEAK	U.S. 95-MACKAY AREA	
	REPEATER LOCATION GRIZZLY MTN. RELAY RIDGE KELLY MTN. SALMON BALDY GROUSE PEAK EAST BUTTE MONIDA BLACK MTN. ASHTON HILL STEIN MTN.	REPEATER LOCATION GRIZZLY MTN. RELAY RIDGE RELAY RIDGE KELLY MTN. SALMON BALDY GROUSE PEAK EAST BUTTE MONIDA BLACK MTN. ASHTON HILL STEIN MTN. COVERAGE AREA IDAHO FALLS/DRIGGS AREA IDAHO FALLS/DRIGGS AREA RIRIE TO SWAN VALLEY SALMON AREA CHALLIS AREA ARCO AREA I-15-SPENCER TO MONTANA BLACK MTN. ASHTON HILL ISLAND PARK AREA NORTH SALMON TO MONTANA

CONTACT YOUR COMMUNICATIONS OFFICE FOR CHANNEL INFORMATION IN YOUR ASSIGNED AREA

815.0 MOBILE RADIOS

All mobile radios will hear calls from both the base station and other mobiles. An important fact to remember is that even though both calls can be heard, the radio must be on the correct channel in order to answer the call. The best practice to follow when calling through a repeater is to identify the tone on which the calling party is talking. A proper call should include all of the following information: (Station Being Called) (Calling Station) (Repeater Tone).

Key the mic. Wait about one second. Then talk across the mic face and say the following:

" 6 0 <u>from</u> 6 9 0 <u>Tone 2</u> "
(Station Being Called) (Calling Station) (Repeater Tone)

Pronounce each numeral separately.

Refer to the manufacturer's operating manual for instructions on the proper operation of each type of mobile radio.

816.0 BASE STATIONS

The base station operates on Channels 1, 2 or 3, depending on which district is involved. Electrical power is continuously supplied to fixed stations and control consoles; it is not necessary to turn a power switch on. The station will always be in condition to receive messages.

Monitor the channel before making a call. If there are no communications in process with the desired station, proceed to place the station in condition to transmit:

- Select the proper radio channel and tone.
- Place the station in transmit condition by depressing the "talk" switch on the microphone. Pause one second or so before beginning to talk. (Electrical and mechanical functions are involved in preparing the station transmitter.) Depress the "talk" switch firmly while you are transmitting.
- Speak in a normal tone of voice. The loudness of your outgoing message is chiefly regulated by changing the distance from your mouth to the microphone. There are no external knobs on the radio unit to regulate the loudness of the message you are sending. Speak directly into the microphone. A distance from six to eight inches between the mouth and microphone is suggested although the proper distance varies considerably between individuals.
- The prescribed procedure is: "Called station from calling station." Pronounce each numeral separately.

All conversations must be concluded by identifying the fixed station. No call sign is required from a mobile station transmitting solely on the frequency of the associated

base station. A mobile unit operating on frequency channels for car-to-car use only or through mobile relay, concludes the message exchange with the mobile call sign.

Don't rush! It is far more effective to state your message once, slowly and distinctly, than to have to repeat. Each message should be as direct and brief as practical. Remember, you are talking to a person and conversational language is usually more easily understood.

The talk switch must be released to hear a reply from the station called.

The operator at the base station's control point concludes the message exchange by stating the FCC assigned call letters for the base station (see Figure 816).

In certain districts, multiple base stations are necessary to cover the whole district. Thus, some repeaters in these districts will have the same numbered tone. It is particularly important in these districts to use the proper call sign.

Figure 816

IDAHO TRANSPORTATION DEPARTMENT RADIO STATIONS

Call	Frequency	Location
DISTRICT 1		
WNNO 700		Hoo Doo
KVP 690	453.150, .800	Schweitzer Peak
KVP 689	453.150, .800	Mica Peak
WSY 86	458.150, .450	Mica Peak
KWF 764	453.150, .800	Black Mtn. (Bonners Ferry)
KWF 765	453.150, .800	Wardner Peak
KWF 766	453.150, .800	St. Joe Baldy Mtn.
KWT 648	453.150	Osburn Engr. Office
WAH 220	458.150, .450	Osburn Engr. Office
WAS 591	458.150, .450	Coeur d'Alene
KXM 915	453.150, .450	Coeur d'Alene
WNXC 720	,	Elk Butte
DISTRICT 2		
KAQ 516	453.150, .800	Teakon Butte
WCH 765	458.150, .450	Moscow
KPV 688	453.150, .800	Cottonwood Butte
WZB 284	453.150, .800	Pilot Knob
WSY 85	458.150, .450	Cottonwood Butte
WBL 269	458.150, .450	Powell
KWT 642	453.150, .800	Culdesac Grade
KXX 696	453.150, .800	Cool Water
KWT 647	453.150, .800	Castle Butte
KWT 643	453.150, .800	Lewiston Grade
WAH 221	458.150, .450	Lewiston Grade
KXM 914	453.150, .800	Moscow Mtn.
KZF 877	453.150, .800	Powell
WCL 745	458.150, .450	Reed Bar
WBL 268	458.150, .450	Bald Mtn.
KZF 876	453.150, .800	Bald Mtn.
WCH 76	458.150, .450	Grangeville
WNKI 561		Whitebird
DISTRICT 3		
KRE 319	453.800, .150	Doe Point
KRE 320	453.800, .150	Dist. 3 Headquarters
KRE 321	453.800, .150	Shafer
	,	

Figure 816 (Contd)

Call	Frequency	Location
DISTRICT 3 (Contd)	
KRE 322 WSZ 42 KVN 868 WSZ 43 KVR 959	453.800, .150 458.150, .450 453.150, .800 458.150, .450 453.150, .800	Snowbank Shafer Cold Springs Ridge Snowbank Mtn. (Hwy Dist. 3, North Channel) Lucky Peak
KVR 960 KWT 646 KXQ 798 WAU 685 WNIZ 786 KNHT 843 WNPH 918	453.150, .800 453.150, .800 453.150, .800 458.150, .450	Jackson Peak Brundage Mtn. Nat'l Guard Armory, Boise Nat'l Guard Armory, Boise Packer John Pilot Peak Sturgil
DISTRICT 4		
WPML 404 WNNI 263 WPCV 751 KNNF 809 KUE 642 KUZ 870 KUZ 871 WSR 65 KXX 308 KVN 870 KNFG 813 WSZ 40 KWJ 252 KXM 917 WAS 593 KNGB 859	453.050; 458.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050 453.050	Galena Harrison Bell Mountain Sweetzer Albion Ridge Baldy Mtn., Ketchum Notch Butte Notch Butte Davis Mtn. Weigh Station, Bliss Basin Butte Basin Butte Flat Top Butte Shoshone Cotterell POE
DISTRICT 5 KUE 644 KUE 643 KUG 805 WNJN 367 WSR 63 WSR 62 KWT 641	453.150, .800 453.150, .800 453.150, .800 453.150, .800 458.150, .450 458.150, .450 453.150, .800	Hell Hole Ridge Chinks Peak Sedgwick Peak Malad Hill Sedgwick Peak Chinks Peak Paps Peak

Figure 816 (Contd)

Call	Frequency	Location	_
DISTRICT 5	Contd)		
KWT 645	453.150, .800	Vortac Hill	
KXM 916	453.150, .450	Pocatello	
WAS 592	458.150, .450	Pocatello	
WNRM 750	458.150, .450	Black Mountain	
DISTRICT 6			
KVN 866	453.150, .800	Grouse Peak	
WSR 64	458.150, .050	Grouse Peak	
KVP 692	453.150, .800	Relay Ridge	
KVP 694	453.150, .800	Baldy Mtn. (Salmon)	
KZE 757	453.150, .800	Mackay Peak	
KVP 691	453.150, .800	East Butte	
KKW 209	453.150, .800	Kelly Mtn.	
KVP 693	453.150, .800	Rigby	
WSY 87	458.150, .450	Rigby	
WSY 88	458.150, .450	Salmon	
WDQ 926	458.150, .450	Idaho Falls	
KVP 695	453.150, .800	Salmon	
KKC 758	453.150, .800	Grizzly	
KWT 644	453.150, .800	Big Bend/Ashton Hill	
KOV 25	161.73; 156.99	Salmon Baldy	
KOV 26	157.41	Salmon	
WNIX 675	453.150, .800	Monida Mountain	
WNJZ 618	453.150, .800	Potaman Peak	
WNNE 628	453.150, .800	Stein Mountain	
WBZ 304	458.450 - 150	Salmon Building Control	
DISTRICT 9			
KM 8393	453.050, .150, .800 458.050, .150, .450	Anywhere	
KE 5709	2950-3050	Anywhere	
KOH 968	2455	Radar Anywhere	
KC 3174	2455	Radar Anywhere	
KWT 640	453.150, .800	Any temporary fixed location	

817.0 DEFECTIVE OR INOPERATIVE RADIO EQUIPMENT

The operator on duty at the fixed station control point for the area has the responsibility of reporting defective radio equipment to the radio technician for the area. WILLFUL DAMAGE TO RADIO TRANSMITTING EQUIPMENT IS A FEDERAL OFFENSE. ANY EVIDENCE OF SUCH DAMAGE SHOULD BE REPORTED IMMEDIATELY TO YOUR SUPERVISOR AND SECTION HEAD, LOCAL LAW ENFORCEMENT OFFICIALS, AND THE FBI AS WELL AS TO THE BUREAU OF MICROWAVE SERVICES.

817.1 Outside Agency Frequencies

To have frequencies added to the radio, it is required that there be a letter on file at the Bureau of Microwave Services shop for the outside agency's frequency authorizing use.

818.0 UNIT IDENTIFIERS

All base stations and mobile units have been assigned unit identifiers that will be used when calling or referring to these stations.

Location	<u>Identifier</u>
Coeur d'Alene	10
Shop	11
Maintenance Office	12
Coeur d'Alene Res	13
Osburn Res	14
Sandpoint	17
Bonners Ferry	18
Coeur d'Alene Traffic	19
Huetter POE	812
Bonners Ferry POE	816
Lewiston	20
Shop	21
Maintenance Office	22
Lucile	23
Moscow	24
Craigmont	25
Fleming	26
Orofino	27
Lewiston Res	28
Grangeville	29
Lewiston POE	822
Lewiston Hill POE	823

Location	Identifier
Boise	30
Shop	
Maintenance Office	
Service Station	
Res A	
Res B	
Res C	37
Marsing POE	
East Boise POE	890
Horsebend POE	
Shoshone	40
Shop	
Central Maintenance/Construction	
Rupert	43
Shoshone Mtc.	
Jerome	
Hailey	48
Twin Falls	
Hollister POE	
Cotterell POE	
Pocatello	50
Shop	
Maintenance Office	
Supply	
Inkom POE	
Rigby	60
Shop	
Maintenance Office	62
Supply	63
Region Two Control	
Region One Control	68
Salmon	69
Sage Jct. POE	1
Division of Aero & PT	95

Base stations are identified by two-digit numbers. The first digit indicates the district in which the station is located. The second digit zero indicates the district headquarters. Subsequent numbers in the second digit indicate base stations within the district.

Mobile units are identified by numbers that include the maintenance foreman area number and end with the third digit that identifies specific personnel.

Example: Designator <u>3</u> <u>9</u> <u>0</u> is the maintenance foreman at Idaho City.

3 = Mobile unit associated with District 3.

9 = Number assigned to Idaho City foreman area.

0 = Maintenance foreman number used statewide.

District and Boise headquarters staff are assigned specific designator numbers for each position description (see Figure 818-A). The designator is a three-digit number. The first number identifies the district or headquarters (9). The last two digits identify the position description.

Example: $9 \underline{01}$ is the Chief Engineer.

5 11 is the District 5 shop foreman.

Employees that report to a listed designated position (see Figure 818-A) may use the listed number or their supervisor with a fourth digit.

Example: 511-1 is a traveling mechanic attached to the District 5 shop foreman.

For job position designators outside the district and headquarters offices, select the particular foreman area from Figure 818-B. The foreman area number is the first two digits of the designator.

The third digit (1 through 8) should be assigned by the maintenance foreman in his area. Maintenance personnel should be assigned a third digit number 1 through 8. Zero in the third digit is reserved statewide for the maintenance foreman.

The following table should be used:

Position Description	Third Digit Number
Maintenance Foreman	0
Maintenance Personnel	1
Maintenance Personnel	2
Maintenance Personnel	3
Maintenance Personnel	4
Maintenance Personnel	5
Maintenance Personnel	6
Maintenance Personnel	7
Maintenance Personnel	8

Employees that report to a listed designated position may use the listed number of this position with an added fourth digit.

Figure 818-A

MOBILE RADIO DISTRICT AND HEADQUARTERS STAFF DESIGNATORS

Position District Staff Description **Headquarters Staff** - 00 ITD Director District Engineer - 01 Chief Engineer Transportation Planner - 02 Transportation Planning Admin. ADE(E) - 03 Motor Vehicles Administrator - 04 Asst. Chief Engineer (O) ADE(O) Maintenance Engineer Dist. Mtce. Engr., Regional Engr.** - 05 Dist. Mtls. Engineer - 06 Materials Engineer Dist. Loc. Engineer - 07 **Environmental Manager** Dist. Design Engineer - 08 Design Engineer Dist. Traffic Engineer - 09 Traffic Engineer - 10 Construction Engineer Shop Foreman - 11 Equipment Superintendent - 12 Special Mtce. Foreman Bridge Inspection Engr. - 13 Mtce. Foreman (Bridge) Maintenance Quality Specialist Mtce. Foreman (Striping) - 14 Traffic Services (Road Inventory) Sign Foreman - 15 Sr. POE Insp. (Huetter) Supply Superintendent **P&MM Supervisor** - 16 R/W District Agent Right-of-Way Supervisor - 17 Dealer Invest. (C.d'A)* - 18 FHWA - Area Engineer - 19 POE Manager - 20 Dealer Invest. (Boise)* - 21 Trans. Planning Administrator - 25 Sr. POE Inspec. (Lewiston) - 30 Dealer Invest. (Boise)* - 31 Aero & P.T. Administrator - 32 Airport Development Supervisor - 33 Transportation Maintenance Supervisor (Aero.) - 40 Dealer Invest. (Twin Falls)* Sr. POE Inspec. (Bliss) - 45 - 46 Sr. POE Inspec. (Cotterell) - 47 Sr. POE Inspec. (Holister) Dealer Invest. (Idaho Falls)* - 50 - 55 Sr. POE Inspec. (Inkom) - 60 Dealer Invest. (Idaho Falls)* - 65 Sr. POE Ins. (Beeches Cor.) Roving POE(s), District 1* - 91 - 92 Roving POE(s), District 2* - 93 Roving POE(s), District 3* Roving POE(s), District 4* - 94 - 95 Roving POE(s), District 5*

Roving POE(s), District 6*

- 96

^{*}Use the four-digit system when more than one roving POE or Dealer Investigator is assigned to one district, e.g., 993-1 and 993-2 would be the designators for two roving POEs assigned to District 3. Similarly, 930-1 and 930-2 would designate two Dealer Investigators in District 3.

^{**}Use the four-digit system to identify the specific region for Regional Engineers within a district, e.g., 305-1 and 305-2 would be the designators for District 3, Regional Engineers for Regions 1 and 2.

Figure 818-B

MOBILE RADIO DISTRICT FIELD DESIGNATORS

	Maintenance Foreman Location	Foreman Area No
<u>DISTRICT 1</u>	Bonners Ferry Sandpoint Osburn St. Maries Coeur d'Alene (South & West) Coeur d'Alene (North & East)	12 13 14 15 16 17
DISTRICT 2	Lewiston Moscow Craigmont Fleming Orofino Grangeville	22 24 25 26 27 29
DISTRICT 3	New Meadows New Plymouth Boise Mountain Home Caldwell Banks Idaho City	32 33 34 35 37 38 39
DISTRICT 4	Rupert Shoshone Jerome Hailey Twin Falls	43 45 46 48 49
DISTRICT 5	Malad Pocatello Preston Blackfoot American Falls Soda Springs Montpelier	53 54 55 56 57 58 59
DISTRICT 6	Ashton Sugar City Salmon Arco Dubois Rigby	64 65 66 67 68 69

Example: Multiple shift operators

Inspectors

Temporary replacement, etc.

The first digit of the designator of personnel attached to the districts will be the district number plus the position description.

Example: District 3 Maintenance Engineer – 305

FHWA Engineer District 3 – 319

The first digit of the designator of personnel attached to the headquarters staff will be "9" followed by the position description.

819.0 SAFETY

DO NOT carry extra gasoline tanks in closed compartments with radio equipment. A spark from relay contacts in the radio equipment may ignite accumulated vapors and result in a serious explosion.

DO NOT use transmitting equipment when within 1,000 feet of any part of an electric blasting circuit. Radio hazard with electric blasting caps exists when the original bundle of wires has been disturbed, extended or spliced.

DO NOT open the cabinet or case of any radio unit unless specifically instructed by the radio technician and are under his direct supervision. High voltage may be present to result in painful if not fatal shock.

Always turn off cellular phones and other transmitting equipment when fueling vehicles.

In the event of a fire in a radio cabinet, use a chemical fire extinguisher. Water should not be used to extinguish fires in any electrical apparatus as the water may provide a path for electric current and result in shock.

820.0 MAINTENANCE WORK REQUESTED BY BUREAU OF MICROWAVE SERVICES

The Bureau of Microwave Services occasionally requests maintenance or minor construction work be accomplished by state forces at their telecommunications facilities around the state.

Before any work that will cost more than \$1,000.00 is performed, a written request detailing the work must be submitted to the Maintenance Supervisor for approval. If approval is granted, a work authorization is to be initiated for project.